

REMARKS

Claims 1-15 are presented for consideration, with Claim 1 being independent.

Initially, Applicant notes with appreciation that Claims 11, 13/11, 13/12, 14 and 15 are indicated as containing patentable subject matter and would be allowed if placed in independent form. These claims remain in dependent form, however, as it is respectfully submitted that parent Claim 1 is patentable in its own right for the reasons set forth below.

Claims 1, 2 and 4-9 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Ophey '247. In addition, Claims 1-10 and 13/10 are rejected under 35 U.S.C. §103 as allegedly being obvious over Maeda '302 in combination with Danziger '297. These rejections are respectfully traversed.

Claim 1 of Applicant's invention relates to a diffractive optical element comprised of a grating structure with a periodic first blazed type grating portion and a periodic second blazed type grating portion which is arranged on a light exit side of the first blazed type grating portion. As amended, Claim 1 sets forth that in at least one of the first blazed type grating portion and the second blazed type grating portion, periodic grating section structures smaller than a used wavelength are arranged in a periodic manner.

Support for the claim amendments can be found beginning on page 13, line 20 of the specification. In accordance with Applicant's claimed invention, a high performance diffractive optical element can be provided.

The patent to Ophey relates to an optical transmissive lens element 1 comprised of a lens body 3 having an entrance surface 4 and an exit surface 5. The entrance surface is provided with a grating 10 alternately comprising grating grooves 11 and intermediate

grating strips 12. The exit surface 5 is provided with grating grooves 16 and intermediate strips 17 arranged to be perpendicular to the grating 10.

In contrast to Applicant's claimed invention, however, Ophey is not understood to teach or suggest, among other features, a grating structure having first and second periodic blazed type grating portions, with at least one of these grating portions having periodic grating section structures smaller than a used wavelength arranged in a periodic manner. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. §102(b) is respectfully requested.

Maeda relates to an optical pick-up device that includes a diffractive optical element 7 with a first grating portion 7a and a second grating portion 7b (see Figure 3). With respect to Claim 1, the Office Action acknowledges that Maeda does not teach that the first and second grating portions are blazed type grating portions.

The secondary citation to Danziger relates to a diffractive optical element and was cited to compensate for the deficiencies in Maeda. In Danziger, the diffractive optical element includes a base 10 that has phase zones 1 of phase levels 12 (as shown in Figure 2a and 2b).

Without conceding the propriety of combining Maeda and Danziger in the manner proposed in the Office Action, it is submitted that such a combination still fails to teach or suggest, inter alia, a grating structure with periodic first and second blazed type grating portions, wherein in at least one of the grating portions, period grating section structures smaller than a used wavelength are arranged in a periodic manner.

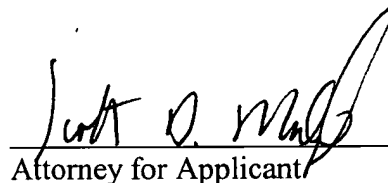
Therefore, reconsideration and withdrawal of the rejection of Claims 1-10 and 13/10 under 35 U.S.C. §103 is respectfully requested.

Accordingly, it is submitted that Applicants' invention as set forth in independent Claim 1 is patentable over the cited art. In addition, dependent Claims 2-15 set forth additional features of Applicant's invention. Independent consideration of the dependent claims is respectfully requested.

In view of the foregoing, reconsideration and allowance of this application is deemed to be in order and such action is respectfully requested.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Scott D. Malpede", is written over a horizontal line.

Attorney for Applicant
Scott D. Malpede
Registration No. 32,533

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

SDM/vmm

DC_MAIN 161132v1